

REMARKS

I. Claim Objections

Claims 3-4, 6, 11, 21-22, 26 and 30 were objected to for failing to cite the appropriate sequence identifiers. The Examiner states that according to 37 C.F.R. 1.821 through 1.825, Applicants are required to assign a sequence identifier (SEQ ID NO) for every disclosed unbranched nucleic acid sequence of ten or more nucleotides and list these sequences individually in a sequence listing as a separate part of the disclosure. Applicants have amended claims 11 and 30 accordingly by assigning a sequence identifier (SEQ ID NO) and canceled claims 3-4, 6, 21-22, and 26, thereby rendering this ground of rejection moot.

II. Specification

The Examiner states the attempt to incorporate subject matter into this application by reference to WO98/39641, published September 11, 1988, on page 6, 3rd paragraph, is improper because this publication does not disclose the preferential expression in seed by the use of the Ubi-1 promoter as indicated by Applicants. The WO98/39641 publication relates to a method for the inspection of a part by thermal imaging and not the use of ubiquitin promoters. Applicants have amended the specification to correct a typographical error of the PCT Application number. It is submitted that this typographical correction does not constitute an introduction of new matter. The specification identifies the reference on page 6, 3rd paragraph by publication date (September 11, 1998) and what the reference disclosed. Particularly, Applicants state in their specification that this reference “shows that the Ubi-1 promoter, previously thought to be constitutive, has recently been shown to express preferentially in the seed, making the engineered promoters of the invention with endosperm expression surprising.” (See page 6, 3rd

paragraph) Therefore, Applicants believe the Amendment does not introduce new matter, but does improve the specification, and therefore should be entered.

III. Claim Rejections – 35 U.S.C. § 112

Claims 4, 7-9, 10-12, and 20-31 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner states that claim 4 recites the limitation “said heat shock sequence” in claim 1, however, there is insufficient antecedent basis for this limitation in the claim. Applicants have canceled claim 4, thus alleviating this rejection.

The Examiner states that claim 7 recites the limitation “the heat shock element region” in claim 1, but there is insufficient antecedent basis for this limitation in the claim. Applicants have canceled claim 7, thereby alleviating this rejection.

Claims 8 and 27 recite the limitation “the overlapping HSE.” The Examiner states there is insufficient antecedent basis for this limitation in these claims. Additionally, claims 8 and 27 recite “wherein said sequence includes a deletion of the overlapping HSE at –204 - –190.” This statement is vague and indefinite since Applicants do not indicate which specific nucleic acid sequence the position –204 - –190 refers to. Applicants have amended claims 8 and 27 by giving proper antecedent to the limitation, by deleting “the” and inserting “an.” Additionally, Applicants have amended claims 8 and 27 by indicating the specific nucleic acid sequence, SEQ ID NO: 1, that position –204 - –190 refers to, thereby alleviating this rejection.

Claim 9 recites “[t]he promoter sequence of claim 1 further comprising a DNA binding factor or transcription factor.” The Examiner states this phrase is vague and indefinite since DNA binding factors and transcription factors are known to those in the art to be proteins that bind to specific sequences within a nucleic acid molecule, they are not known to be nucleic acid

sequences. Therefore, it is unclear how the nucleic acid promoter of claim 1 is to comprise a DNA binding factor of transcription factor. Applicants have amended the claims (9-12) to clarify that the promoter sequence further comprises a transcription binding factor. Support for these amendments can be found on page 30 and Table A, page 31 of the specification.

Claims 10-12 recites the limitation “wherein said transcription factor” in claim 1. The Examiner states there is insufficient antecedent basis for this limitation in the claim. Applicants have amended claim 10 to depend from claim 9, thus giving proper antecedent basis to the limitation “wherein said transcription factor,” thus alleviating this rejection. The amendment made to claim 10 should place claims 11-12 in allowable form since claim 11 depends from 10 and claim 12 depends from claim 11.

Claims 11-12 recites “said Psi element” in claim 10. The Examiner state there is insufficient antecedent basis for this limitation in the claim. Applicants have given proper antecedent basis to the limitation, thereby alleviating this rejection. The amendment made to claim 11 should place claim 12 in allowable form since claim 12 depends from claim 11.

Claims 20-31 recite “[T]he promoter sequence of claim 19.” The Examiner states this phrase is unclear because claim 19 recites “[A] method for causing expression of a structural gene.” It appears that dependent claims 20-31 are drawn to product claims and not to a method as recited in independent claim 19 and it is likely Applicants intended claim 20, for example, to recite: “[T]he method of claim 19, wherein the promoter sequence includes a single heat shock element.” Applicants have canceled claims 20-26, thus alleviating this rejection.

Claims 23-26 recite the limitation “said sequence comprises two adjacent heat shock elements” in claim 20. The Examiner states there is insufficient antecedent basis for this

limitation in claim 20, since claim 20 recites that the sequence includes a single heat shock element. Applicants have canceled claims 23-26, thus alleviating this rejection.

IV. Claim Rejections 35 U.S.C. § 102

Claims 1-5, 13-22, 32-35 and 39 were rejected under 35 U.S.C. § 102(b) as being anticipated by Quail et al. (EP0342926 A2: EP) or under 35 U.S.C. § 102(e) as being anticipated by Quail et al. (U.S. Patent No. 6,054,574: U.S.). The Examiner states that Quail et al. teaches each and every aspect of the instant invention and thereby anticipating Applicant's claimed invention. Applicants respectfully traverse this rejection. The references, Quail et al. EP0342926 A2 and 6,054,574 do not anticipate because they do not contemplate Applicants' invention. Quail et al., EP 0342926 A2, discloses in part a ubiquitin promoter region that comprises heat shock consensus elements (See col 14, lines 31-33; col. 18, lines 52-54; col. 22, lines 37-43; col. 23, lines 56-58; and col. 24, lines 6-11). Quail does not contemplate the use of a ubiquitin promoter with no heat shock elements as claimed. Thus, Applicants' invention is patentably distinct, therefore, no anticipation.

Additionally, Quail et al. U.S. Patent No. 6,054,574 and 5,614,399 do not anticipate under 35 U.S.C. section 102(e). Quail et al. U.S. Patent No. 6,054,574 is distinguishable because it teaches a plant ubiquitin promoter which has two overlapping heat shock consensus elements. (See col. 6, line 53; col. 11, lines 13-15; col. 12, lines 41-44; col. 16, lines 20-21; and col. 29, lines 41-42). On the contrary, Applicants claimed method discloses a novel promoter sequence which does not include any heat shock elements (See amended claim 1).

Moreover, Quail et al. U.S. Patent No. 5,614,399 is distinguishable from the present invention. Quail et al. teaches a method for inducing the constitutive expression of a DNA sequence of interest in a plant that is operably joined to a plant ubiquitin regulating region,

wherein the regulating region comprises two heat shock elements (See col. 6, line 42-44; col. 12, lines 30-33; col. 16 lines 5-7; col. 18, lines 38-42; col. 19, lines 28-33; and col. 29, lines 25-26). Conversely, Applicants claimed method discloses a modification of a constitutive promoter sequence that effect even higher levels of foreign gene expression in callus, leaves, or seeds such that the promoter does not contain any heat shock elements. (See amended claim 1). Thus, there is no anticipation. Applicants respectfully request withdrawal of this rejection under 35 U.S.C. § 102.

Claims 1, 7-8, 13-19, 27, 32-38, and 40 were rejected under 35 USC 102(a) as being anticipated by Goldsbrough et al. (WO00/15810 A1). The Examiner states Goldsbrough et al. describes the construction of plant expression constructs wherein the constructs comprise a reconstituted ubiquitin regulatory system comprising a modified ubiquitin promoter that lacks the two overlapping heat shock consensus sequence elements. Applicants respectfully traverse this rejection. There is no anticipation under section 102(a) as conception and reduction to practice of Applicants' invention took place before the effective date of the cited references. Applicants respectfully request Examiner to refer to the declaration of Joseph M. Jilka, the inventor, which establishes conception and reduction to practice of the invention in the United States prior to the international publication date of the cited reference. Applicants respectfully request Examiner to withdraw this rejection under section 102(a) and reconsideration in light of the declaration.

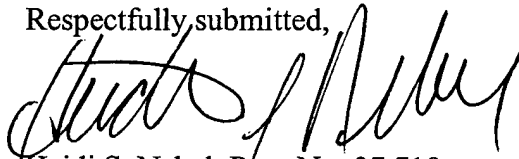
V. CONCLUSION

In conclusion, Applicants respectfully submit that the present case is in condition for allowance, and respectfully request continued prosecution to that end.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Heidi S. Nebel", written over the typed name.

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